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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,642	08/22/2000	SHINGO SUZUKI	107100	9149

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT PAPER NUMBER

2677

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,642

Applicant(s)

SUZUKI, SHINGO

Examiner

Kimnhung Nguyen

Art Unit

2677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 7/28/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,9-11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,9-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 2, 9-11 and 13-14 are pending. The examination results are as following.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2, 9-11 and 13-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 2, lines 8-10, “whereby light traveling in a direction substantially perpendicular to the major surface of the transparent substrate so as to travel toward the liquid crystal panel” is not supported in the specification. See MPEP 2173.05(i), Negative Limitations.

The specification does mention “A square transparent substrate 2 is provided close to the surface of the liquid crystal panel 1, and fluorescent tube 3 as a bar-like light source is provided parallel with the side surface of the transparent substrate” on page 8, lines 6-9. However, the specification does not disclose that “whereby light traveling in a direction substantially perpendicular to the major surface of the transparent substrate so as to travel toward the liquid crystal panel” as claim 2.

For examining the claims on the merit, examiner will consider the claim languages without the limitation “whereby light traveling in a direction substantially perpendicular to the major surface of the transparent substrate so as to travel toward the liquid crystal panel”.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2, 9-11 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokota et al. (US 5,764,315).

Regarding claim 2, Yokota et al. discloses in figures 12,14, 28, a spread illuminating apparatus in which a square transparent substrate (60, fig. 14) is provided close to the surface of a liquid crystal panel (see abstract) is illuminated through the transparent substrate (32, see fig. 12, col. 9, lines 10-20) by a bar-like source (33) which is provided at and parallel with a side surface of the transparent substrate, wherein a plurality of straight groove portions (61a, 61b) are formed directly on the major surface of the transparent substrate intersecting one another obliquely with respect to the four sides of the transparent substrate, whereby light traveling in a direction substantially parallel to the major surface of the transparent substrate (see fig. 12, col. 9, lines 10-20).

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Regarding claims 9-11, Yokota et al. discloses the groove portions are substantially triangular in cross section (see figures 5, 21), and wherein the interval between the groove portion is decrease as the distance from the bar-like light source (see figure 11, see the angle of two slopes of convex and concave, see column 6, lines 7-25), or the depth of the groove portions is increased as the distance from the bar-light source increase (see the dept of convex and concave, see column 6, lines 18-49).

Regarding claims 13-14, Yokota et al. disclose that wherein the bar-like light source comprises a bar-like fluorescent tube (33) and the bar-like light source also includes an inherent bar-like transparent light conductive member and a light emitting diode which is provided at the end portion of the bar-like transparent light conductive member (see column 1, lines 39-44, see figure 4, column 2, lines 51-55).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
October 14, 2005

AMR A. AWAD
PRIMARY EXAMINER
Amr A. Awad